

# Netflix Dataset Analysis

The netflix Dataset has information about the TV Shows and Movies available on Netflix till 2021, but here i have search the subscriber as per our dataset

In [39]:

```
# Importing the dataset
import pandas as pd
Netflix=pd.read_csv(r"C:\Users\pc\Desktop\Netflix Userbase.csv") # Loading the dataset
```

In [40]:

```
Netflix # Here present the top 5 rows and top bottom rows with total columns
```

Out[40]:

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration
0	1	Basic	10	15-01-2022	10-06-2023	United States	28	Male	Smartphone	1 Month
1	2	Premium	15	05-09-2021	22-06-2023	Canada	35	Female	Tablet	1 Month
2	3	Standard	12	28-02-2023	27-06-2023	United Kingdom	42	Male	Smart TV	1 Month
3	4	Standard	12	10-07-2022	26-06-2023	Australia	51	Female	Laptop	1 Month
4	5	Basic	10	01-05-2023	28-06-2023	Germany	33	Male	Smartphone	1 Month
...	...	...	...	...	...	...	...	...	...	...
2495	2496	Premium	14	25-07-2022	12-07-2023	Spain	28	Female	Smart TV	1 Month
2496	2497	Basic	15	04-08-2022	14-07-2023	Spain	33	Female	Smart TV	1 Month
2497	2498	Standard	12	09-08-2022	15-07-2023	United States	38	Male	Laptop	1 Month
2498	2499	Standard	13	12-08-2022	12-07-2023	Canada	48	Female	Tablet	1 Month
2499	2500	Basic	15	13-08-2022	12-07-2023	United States	35	Female	Smart TV	1 Month

2500 rows × 10 columns

## Top 5 records of the dataset

In [41]:

```
Netflix.head()
```

Out[41]:

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration
0	1	Basic	10	15-01-2022	10-06-2023	United States	28	Male	Smartphone	1 Month
1	2	Premium	15	05-09-2021	22-06-2023	Canada	35	Female	Tablet	1 Month
2	3	Standard	12	28-02-2023	27-06-2023	United Kingdom	42	Male	Smart TV	1 Month
3	4	Standard	12	10-07-2022	26-06-2023	Australia	51	Female	Laptop	1 Month
4	5	Basic	10	01-05-2023	28-06-2023	Germany	33	Male	Smartphone	1 Month

## Bottom 5 Records of the dataset

In [42]:

```
Netflix.tail()
```

Out[42]:

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration
2495	2496	Premium	14	25-07-2022	12-07-2023	Spain	28	Female	Smart TV	1 Month
2496	2497	Basic	15	04-08-2022	14-07-2023	Spain	33	Female	Smart TV	1 Month
2497	2498	Standard	12	09-08-2022	15-07-2023	United States	38	Male	Laptop	1 Month
2498	2499	Standard	13	12-08-2022	12-07-2023	Canada	48	Female	Tablet	1 Month
2499	2500	Basic	15	13-08-2022	12-07-2023	United States	35	Female	Smart TV	1 Month

## This step show the dataset how many rows and columns

In [43]:

```
Netflix.shape
```

Out[43]:

```
(2500, 10)
```

## To shows No. of total Values (elements) to the Dataset

In [44]:

```
Netflix.size
```

Out[44]:

```
25000
```

## To shows each columns name with this command

```
In [45]: Netflix.columns
```

```
Out[45]: Index(['User ID', 'Subscription Type', 'Monthly Revenue', 'Join Date',
       'Last Payment Date', 'Country', 'Age', 'Gender', 'Device',
       'Plan Duration'],
      dtype='object')
```

## Show the Data type of each columns

```
In [46]: Netflix.dtypes
```

```
Out[46]: User ID           int64
Subscription Type    object
Monthly Revenue      int64
Join Date            object
Last Payment Date   object
Country              object
Age                  int64
Gender               object
Device               object
Plan Duration        object
dtype: object
```

**It is show the Indexes, columns, data-types of each column, memory of usage**

```
In [47]: Netflix.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 2500 entries, 0 to 2499
Data columns (total 10 columns):
 #   Column           Non-Null Count  Dtype  
--- 
 0   User ID          2500 non-null    int64  
 1   Subscription Type 2500 non-null    object  
 2   Monthly Revenue  2500 non-null    int64  
 3   Join Date         2500 non-null    object  
 4   Last Payment Date 2500 non-null    object  
 5   Country           2500 non-null    object  
 6   Age                2500 non-null    int64  
 7   Gender             2500 non-null    object  
 8   Device             2500 non-null    object  
 9   Plan Duration     2500 non-null    object  
dtypes: int64(3), object(7)
memory usage: 195.4+ KB
```

**Task 1. Is there Duplicate Record in this dataset? If yes, then remove the duplicate records.**

## Duplicate()

```
In [48]: Netflix.head(20)
```

Out[48]:

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration
0	1	Basic	10	15-01-2022	10-06-2023	United States	28	Male	Smartphone	1 Month
1	2	Premium	15	05-09-2021	22-06-2023	Canada	35	Female	Tablet	1 Month
2	3	Standard	12	28-02-2023	27-06-2023	United Kingdom	42	Male	Smart TV	1 Month
3	4	Standard	12	10-07-2022	26-06-2023	Australia	51	Female	Laptop	1 Month
4	5	Basic	10	01-05-2023	28-06-2023	Germany	33	Male	Smartphone	1 Month
5	6	Premium	15	18-03-2022	27-06-2023	France	29	Female	Smart TV	1 Month
6	7	Standard	12	09-12-2021	25-06-2023	Brazil	46	Male	Tablet	1 Month
7	8	Basic	10	02-04-2023	24-06-2023	Mexico	39	Female	Laptop	1 Month
8	9	Standard	12	20-10-2022	23-06-2023	Spain	37	Male	Smartphone	1 Month
9	10	Premium	15	07-01-2023	22-06-2023	Italy	44	Female	Smart TV	1 Month
10	11	Basic	10	16-05-2022	22-06-2023	United States	31	Female	Smartphone	1 Month
11	12	Premium	15	23-03-2023	28-06-2023	Canada	45	Male	Tablet	1 Month
12	13	Standard	12	30-11-2021	27-06-2023	United Kingdom	48	Female	Laptop	1 Month
13	14	Basic	10	01-08-2022	26-06-2023	Australia	27	Male	Smartphone	1 Month
14	15	Standard	12	09-05-2023	28-06-2023	Germany	38	Female	Smart TV	1 Month
15	16	Premium	15	07-04-2022	27-06-2023	France	36	Male	Tablet	1 Month
16	17	Basic	10	24-01-2022	25-06-2023	Brazil	30	Female	Laptop	1 Month
17	18	Standard	12	18-10-2021	24-06-2023	Mexico	43	Male	Smartphone	1 Month
18	19	Premium	15	15-02-2023	23-06-2023	Spain	32	Female	Smart TV	1 Month
19	20	Basic	10	27-05-2023	22-06-2023	Italy	41	Male	Tablet	1 Month

In [49]: `Netflix.shape`

Out[49]: (2500, 10)

To check the row wise and detect the Duplicate rows

```
In [50]: Netflix[Netflix.duplicated()]
```

```
Out[50]: User ID Subscription Type Monthly Revenue Join Date Last Payment Date Country Age Gender Device Plan Duration
```

**if duplicates data available remove the duplicated data**

```
In [51]: Netflix.drop_duplicates(inplace = True)
```

```
In [52]: Netflix[Netflix.duplicated()]
```

```
Out[52]: User ID Subscription Type Monthly Revenue Join Date Last Payment Date Country Age Gender Device Plan Duration
```

**to check and verify the duplicates dataset**

```
In [53]: Netflix.shape
```

```
Out[53]: (2500, 10)
```

**Task 2:-Find the NULL Value presetn in this data? Show with heatmap.**

**Isnull()**

**To Show where null value is present**

```
In [54]: Netflix.head()
```

Out[54]:

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration
0	1	Basic	10	15-01-2022	10-06-2023	United States	28	Male	Smartphone	1 Month
1	2	Premium	15	05-09-2021	22-06-2023	Canada	35	Female	Tablet	1 Month
2	3	Standard	12	28-02-2023	27-06-2023	United Kingdom	42	Male	Smart TV	1 Month
3	4	Standard	12	10-07-2022	26-06-2023	Australia	51	Female	Laptop	1 Month
4	5	Basic	10	01-05-2023	28-06-2023	Germany	33	Male	Smartphone	1 Month

In [55]:

Netflix.isnull()

Out[55]:

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration
0	False	False	False	False	False	False	False	False	False	False
1	False	False	False	False	False	False	False	False	False	False
2	False	False	False	False	False	False	False	False	False	False
3	False	False	False	False	False	False	False	False	False	False
4	False	False	False	False	False	False	False	False	False	False
...	...	...	...	...	...	...	...	...	...	...
2495	False	False	False	False	False	False	False	False	False	False
2496	False	False	False	False	False	False	False	False	False	False
2497	False	False	False	False	False	False	False	False	False	False
2498	False	False	False	False	False	False	False	False	False	False
2499	False	False	False	False	False	False	False	False	False	False

2500 rows × 10 columns

**to check the all null value with sum functionality also**

In [56]:

Netflix.isnull().sum() # here is no null value

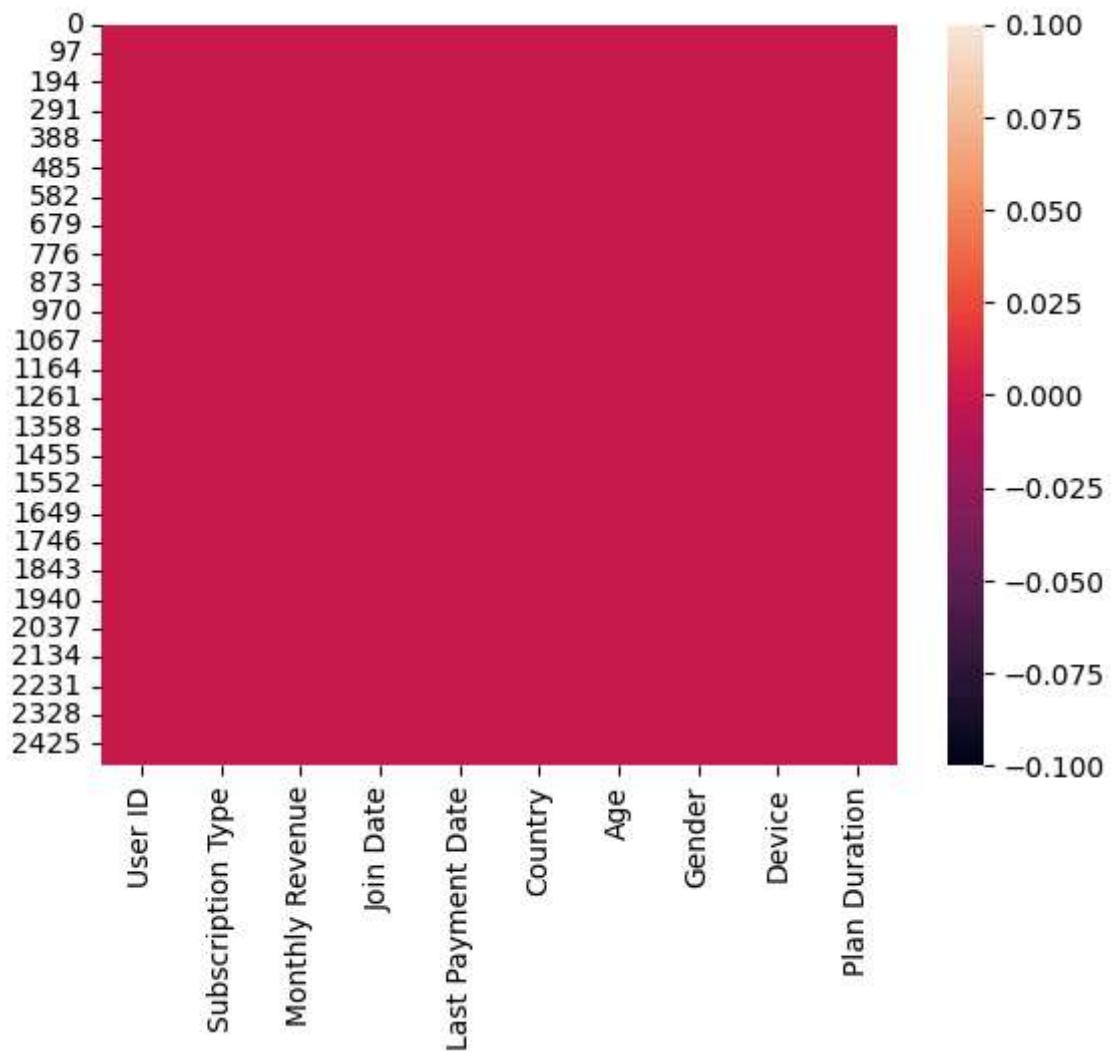
```
Out[56]: User ID      0  
Subscription Type  0  
Monthly Revenue    0  
Join Date          0  
Last Payment Date 0  
Country            0  
Age                0  
Gender              0  
Device              0  
Plan Duration      0  
dtype: int64
```

## Seaborn library (heat-map)

```
In [57]: import seaborn as sns # import the seaborn library
```

```
In [58]: sns.heatmap(Netflix.isnull()) # to present dataset with heatmap
```

```
Out[58]: <Axes: >
```



In [59]: `Netflix.head()`

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration
0	1	Basic	10	15-01-2022	10-06-2023	United States	28	Male	Smartphone	1 Month
1	2	Premium	15	05-09-2021	22-06-2023	Canada	35	Female	Tablet	1 Month
2	3	Standard	12	28-02-2023	27-06-2023	United Kingdom	42	Male	Smart TV	1 Month
3	4	Standard	12	10-07-2022	26-06-2023	Australia	51	Female	Laptop	1 Month
4	5	Basic	10	01-05-2023	28-06-2023	Germany	33	Male	Smartphone	1 Month

```
In [60]: Netflix.dtypes
```

```
Out[60]: User ID           int64
Subscription Type    object
Monthly Revenue      int64
Join Date            object
Last Payment Date   object
Country              object
Age                  int64
Gender               object
Device               object
Plan Duration        object
dtype: object
```

```
In [61]: Netflix['Date_N'] = pd.to_datetime(Netflix["Join Date"])
```

```
C:\Users\pc\AppData\Local\Temp\ipykernel_5208\494120783.py:1: UserWarning: Parsing dates in %d-%m-%Y format when dayfirst=False (the default) was specified. Pass `dayfirst=True` or specify a format to silence this warning.
  Netflix['Date_N'] = pd.to_datetime(Netflix["Join Date"])
```

**In which year highest number of the subscription? Shows with Bar Graph.**

## to\_datetime

```
In [62]: # dtypes
Netflix.dtypes
```

```
Out[62]: User ID           int64
Subscription Type    object
Monthly Revenue      int64
Join Date            object
Last Payment Date   object
Country              object
Age                  int64
Gender               object
Device               object
Plan Duration        object
Date_N              datetime64[ns]
dtype: object
```

```
In [63]: Netflix.head()
```

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration	Date_N
0	1	Basic	10	15-01-2022	10-06-2023	United States	28	Male	Smartphone	1 Month	2022-01-15
1	2	Premium	15	05-09-2021	22-06-2023	Canada	35	Female	Tablet	1 Month	2021-09-05
2	3	Standard	12	28-02-2023	27-06-2023	United Kingdom	42	Male	Smart TV	1 Month	2023-02-28
3	4	Standard	12	10-07-2022	26-06-2023	Australia	51	Female	Laptop	1 Month	2022-07-10
4	5	Basic	10	01-05-2023	28-06-2023	Germany	33	Male	Smartphone	1 Month	2023-05-01

It shows the occurrence of all individual Years in Date column.

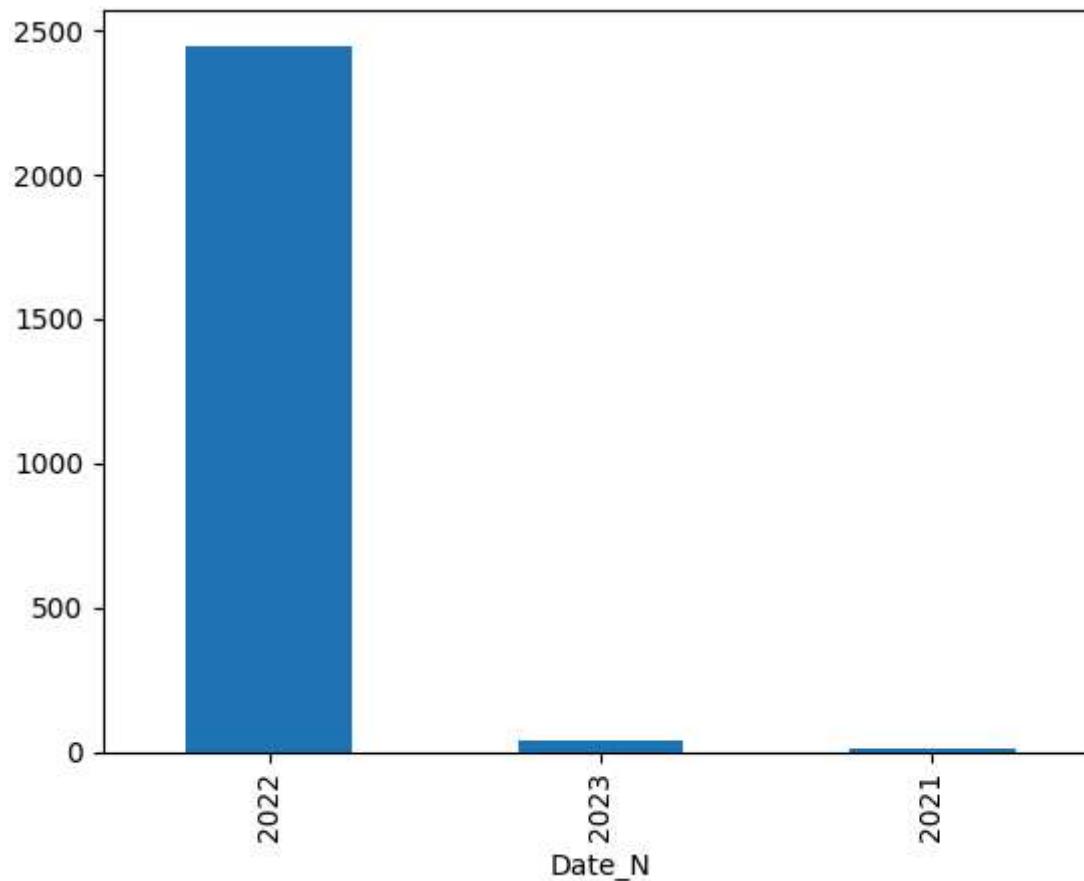
```
In [64]: Netflix['Date_N'].dt.year.value_counts()
```

```
Out[64]: Date_N
2022    2448
2023     38
2021     14
Name: count, dtype: int64
```

## Bar Graph

```
In [65]: Netflix['Date_N'].dt.year.value_counts().plot(kind='bar')
```

```
Out[65]: <Axes: xlabel='Date_N'>
```



Show the subscription that were join in the year 2022.

Creating new column

In [66]: `Netflix.head(2)`

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration	Date_N
0	1	Basic	10	15-01-2022	10-06-2023	United States	28	Male	Smartphone	1 Month	2022-01-15
1	2	Premium	15	05-09-2021	22-06-2023	Canada	35	Female	Tablet	1 Month	2021-09-05

# to create the new year column; it will be consider only year

```
In [67]: Netflix['year'] = Netflix['Date_N'].dt.year
```

```
In [68]: Netflix.head()
```

Out[68]:

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration	Date_N	year
0	1	Basic	10	15-01-2022	10-06-2023	United States	28	Male	Smartphone	1 Month	2022-01-15	2022
1	2	Premium	15	05-09-2021	22-06-2023	Canada	35	Female	Tablet	1 Month	2021-09-05	2021
2	3	Standard	12	28-02-2023	27-06-2023	United Kingdom	42	Male	Smart TV	1 Month	2023-02-28	2023
3	4	Standard	12	10-07-2022	26-06-2023	Australia	51	Female	Laptop	1 Month	2022-07-10	2022
4	5	Basic	10	01-05-2023	28-06-2023	Germany	33	Male	Smartphone	1 Month	2023-05-01	2023

## Filtering

```
In [162...]: Netflix[(Netflix['Subscription Type'] == 'Standard') & (Netflix['year'] == 2022)]
```

Out[162]:

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration	Date_N	year
3	4	Standard	12	10-07-2022	26-06-2023	Australia	51	Female	Laptop	1 Month	2022-07-10	2022
8	9	Standard	12	20-10-2022	23-06-2023	Spain	37	Male	Smartphone	1 Month	2022-10-20	2022
23	24	Standard	12	03-04-2022	26-06-2023	Australia	31	Male	Tablet	1 Month	2022-04-03	2022
32	33	Standard	12	21-01-2022	27-06-2023	United Kingdom	41	Female	Laptop	1 Month	2022-01-21	2022
33	34	Standard	12	25-05-2022	26-06-2023	Australia	29	Male	Smartphone	1 Month	2022-05-25	2022
...	...	...	...	...	...	...	...	...	...	...	...	...
2487	2488	Standard	11	18-07-2022	13-07-2023	United Kingdom	29	Female	Smartphone	1 Month	2022-07-18	2022
2489	2490	Standard	10	17-07-2022	15-07-2023	Germany	35	Male	Smart TV	1 Month	2022-07-17	2022
2492	2493	Standard	11	20-07-2022	11-07-2023	Mexico	33	Male	Smart TV	1 Month	2022-07-20	2022
2497	2498	Standard	12	09-08-2022	15-07-2023	United States	38	Male	Laptop	1 Month	2022-08-09	2022
2498	2499	Standard	13	12-08-2022	12-07-2023	Canada	48	Female	Tablet	1 Month	2022-08-12	2022

749 rows × 12 columns

In [163...]

```
Netflix[(Netflix['Subscription Type'] == 'Standard') & (Netflix['year']==2021)]
```

Out[163]:

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration	Date_N	year
6	7	Standard	12	09-12-2021	25-06-2023	Brazil	46	Male	Tablet	1 Month	2021-12-09	2021
12	13	Standard	12	30-11-2021	27-06-2023	United Kingdom	48	Female	Laptop	1 Month	2021-11-30	2021
17	18	Standard	12	18-10-2021	24-06-2023	Mexico	43	Male	Smartphone	1 Month	2021-10-18	2021
22	23	Standard	12	05-12-2021	27-06-2023	United Kingdom	49	Female	Smart TV	1 Month	2021-12-05	2021
27	28	Standard	12	27-09-2021	24-06-2023	Mexico	33	Male	Tablet	1 Month	2021-09-27	2021
37	38	Standard	12	05-11-2021	24-06-2023	Mexico	32	Male	Smartphone	1 Month	2021-11-05	2021
47	48	Standard	12	15-09-2021	24-06-2023	Mexico	32	Male	Tablet	1 Month	2021-09-15	2021
57	58	Standard	12	08-10-2021	24-06-2023	Mexico	34	Male	Smartphone	1 Month	2021-10-08	2021
67	68	Standard	12	09-11-2021	24-06-2023	Mexico	33	Male	Tablet	1 Month	2021-11-09	2021

In [164...]

```
Netflix[(Netflix['Subscription Type'] == 'Standard') & (Netflix['year']==2023)]
```

Out[164]:

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration	Date_N	year
2	3	Standard	12	28-02-2023	27-06-2023	United Kingdom	42	Male	Smart TV	1 Month	2023-02-28	2023
14	15	Standard	12	09-05-2023	28-06-2023	Germany	38	Female	Smart TV	1 Month	2023-05-09	2023
83	84	Standard	12	13-04-2023	25-06-2023	Australia	32	Male	Smartphone	1 Month	2023-04-13	2023
89	90	Standard	13	03-02-2023	23-06-2023	Italy	49	Female	Smartphone	1 Month	2023-02-03	2023
98	99	Standard	12	13-01-2023	24-06-2023	Spain	29	Female	Tablet	1 Month	2023-01-13	2023
108	109	Standard	13	08-02-2023	25-06-2023	Spain	35	Female	Tablet	1 Month	2023-02-08	2023
138	139	Standard	13	24-03-2023	23-06-2023	Spain	40	Male	Smartphone	1 Month	2023-03-24	2023
153	154	Standard	11	11-03-2023	27-06-2023	Australia	27	Male	Laptop	1 Month	2023-03-11	2023
207	208	Standard	15	05-01-2023	23-06-2023	Mexico	36	Female	Tablet	1 Month	2023-01-05	2023
222	223	Standard	12	08-01-2023	25-06-2023	United Kingdom	34	Female	Smartphone	1 Month	2023-01-08	2023

Show only the Title of all subscription type that were joined in india only.

In [165...]

Netflix.head(10)

Out[165]:

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration	Date_N	year
0	1	Basic	10	15-01-2022	10-06-2023	United States	28	Male	Smartphone	1 Month	2022-01-15	2022
1	2	Premium	15	05-09-2021	22-06-2023	Canada	35	Female	Tablet	1 Month	2021-09-05	2021
2	3	Standard	12	28-02-2023	27-06-2023	United Kingdom	42	Male	Smart TV	1 Month	2023-02-28	2023
3	4	Standard	12	10-07-2022	26-06-2023	Australia	51	Female	Laptop	1 Month	2022-07-10	2022
4	5	Basic	10	01-05-2023	28-06-2023	Germany	33	Male	Smartphone	1 Month	2023-05-01	2023
5	6	Premium	15	18-03-2022	27-06-2023	France	29	Female	Smart TV	1 Month	2022-03-18	2022
6	7	Standard	12	09-12-2021	25-06-2023	Brazil	46	Male	Tablet	1 Month	2021-12-09	2021
7	8	Basic	10	02-04-2023	24-06-2023	Mexico	39	Female	Laptop	1 Month	2023-04-02	2023
8	9	Standard	12	20-10-2022	23-06-2023	Spain	37	Male	Smartphone	1 Month	2022-10-20	2022
9	10	Premium	15	07-01-2023	22-06-2023	Italy	44	Female	Smart TV	1 Month	2023-01-07	2023

no data found here it means no indian subscription here

In [166...]: Netflix[ (Netflix['Subscription Type'] == 'Standard') & (Netflix['Country']=='india') ]

Out[166]: User ID Subscription Type Monthly Revenue Join Date Last Payment Date Country Age Gender Device Plan Duration Date\_N year

Find the subscribe in the title of premium with united states

In [167...]: Netflix[ (Netflix['Subscription Type'] == 'Premium') & (Netflix['Country']=="United States") ]

Out[167]:

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration	Date_N	year
20	21	Premium	15	10-06-2023	22-06-2023	United States	26	Female	Laptop	1 Month	2023-06-10	2023
30	31	Premium	15	03-02-2023	22-06-2023	United States	28	Female	Smart TV	1 Month	2023-02-03	2023
40	41	Premium	15	20-01-2023	22-06-2023	United States	31	Female	Laptop	1 Month	2023-01-20	2023
50	51	Premium	15	27-02-2023	22-06-2023	United States	30	Female	Smart TV	1 Month	2023-02-27	2023
60	61	Premium	15	08-02-2023	22-06-2023	United States	28	Female	Laptop	1 Month	2023-02-08	2023
...	...	...	...	...	...	...	...	...	...	...	...	...
2409	2410	Premium	12	02-08-2022	14-07-2023	United States	34	Male	Smartphone	1 Month	2022-08-02	2022
2425	2426	Premium	15	23-07-2022	12-07-2023	United States	51	Male	Smartphone	1 Month	2022-07-23	2022
2440	2441	Premium	10	07-10-2022	10-07-2023	United States	49	Female	Smartphone	1 Month	2022-10-07	2022
2455	2456	Premium	13	11-11-2022	13-07-2023	United States	39	Male	Smartphone	1 Month	2022-11-11	2022
2484	2485	Premium	14	25-07-2022	12-07-2023	United States	47	Female	Tablet	1 Month	2022-07-25	2022

145 rows × 12 columns

In [168...]

```
Netflix[(Netflix['Device']=='Laptop') & (Netflix['Country']=='United States')]
```

Out[168]:

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration	Date_N	year
20	21	Premium	15	10-06-2023	22-06-2023	United States	26	Female	Laptop	1 Month	2023-06-10	2023
40	41	Premium	15	20-01-2023	22-06-2023	United States	31	Female	Laptop	1 Month	2023-01-20	2023
60	61	Premium	15	08-02-2023	22-06-2023	United States	28	Female	Laptop	1 Month	2023-02-08	2023
130	131	Premium	15	06-10-2022	23-06-2023	United States	47	Male	Laptop	1 Month	2022-10-06	2022
150	151	Basic	15	12-12-2022	25-06-2023	United States	30	Female	Laptop	1 Month	2022-12-12	2022
...	...	...	...	...	...	...	...	...	...	...	...	...
2380	2381	Premium	12	30-10-2022	11-07-2023	United States	30	Female	Laptop	1 Month	2022-10-30	2022
2422	2423	Standard	12	19-07-2022	11-07-2023	United States	30	Male	Laptop	1 Month	2022-07-19	2022
2439	2440	Basic	14	29-09-2022	12-07-2023	United States	50	Female	Laptop	1 Month	2022-09-29	2022
2482	2483	Basic	15	28-07-2022	11-07-2023	United States	42	Male	Laptop	1 Month	2022-07-28	2022
2497	2498	Standard	12	09-08-2022	15-07-2023	United States	38	Male	Laptop	1 Month	2022-08-09	2022

121 rows × 12 columns

## Show the top "Subscriber in this dateset"

### Value\_counts()

In [169...]

```
Netflix['Subscription Type'].value_counts().head(10)
```

```
Out[169]: Subscription Type  
Basic      999  
Standard   768  
Premium    733  
Name: count, dtype: int64
```

Show all the records where " Subscription Type=Premium" or "country is United States"

## Filtering ( And, Or, operators)

```
In [170...]: # Here present the dataset with subscription type premium and monthly revenue is 15 days with top five dayaset  
Netflix[(Netflix['Subscription Type']=='Premium') & (Netflix['Monthly Revenue']==15)].head()
```

```
Out[170]:
```

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration	Date_N	year
1	2	Premium	15	05-09-2021	22-06-2023	Canada	35	Female	Tablet	1 Month	2021-09-05	2021
5	6	Premium	15	18-03-2022	27-06-2023	France	29	Female	Smart TV	1 Month	2022-03-18	2022
9	10	Premium	15	07-01-2023	22-06-2023	Italy	44	Female	Smart TV	1 Month	2023-01-07	2023
11	12	Premium	15	23-03-2023	28-06-2023	Canada	45	Male	Tablet	1 Month	2023-03-23	2023
15	16	Premium	15	07-04-2022	27-06-2023	France	36	Male	Tablet	1 Month	2022-04-07	2022

```
In [171...]: # Here present the dataset with subscription type of premium, monthly revenue is  
# 15 Days with count and sum functionality and present the total value.  
  
Netflix[(Netflix['Subscription Type']=='Premium') & (Netflix['Monthly Revenue']==15)].count().sum()
```

```
Out[171]: 1572
```

here present the dataset with subscription type of premium with according to device use laptop and country is united states

```
In [172...]: Netflix[(Netflix['Subscription Type']=='Premium') & (Netflix['Device']=='Laptop') & (Netflix['Country']=='United States')]
```

Out[172]:	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration	Date_N	year
	20	Premium	15	10-06-2023	22-06-2023	United States	26	Female	Laptop	1 Month	2023-06-10	2023
	40	Premium	15	20-01-2023	22-06-2023	United States	31	Female	Laptop	1 Month	2023-01-20	2023
	60	Premium	15	08-02-2023	22-06-2023	United States	28	Female	Laptop	1 Month	2023-02-08	2023
	130	Premium	15	06-10-2022	23-06-2023	United States	47	Male	Laptop	1 Month	2022-10-06	2022
	190	Premium	10	08-07-2022	25-06-2023	United States	46	Male	Laptop	1 Month	2022-07-08	2022
	240	Premium	13	31-05-2022	27-06-2023	United States	47	Male	Laptop	1 Month	2022-05-31	2022
	250	Premium	15	25-06-2022	27-06-2023	United States	30	Male	Laptop	1 Month	2022-06-25	2022
	270	Premium	14	20-08-2022	26-06-2023	United States	41	Male	Laptop	1 Month	2022-08-20	2022
	340	Premium	13	24-08-2022	26-06-2023	United States	44	Female	Laptop	1 Month	2022-08-24	2022
	360	Premium	12	25-11-2022	28-06-2023	United States	36	Female	Laptop	1 Month	2022-11-25	2022
	380	Premium	10	14-07-2022	27-06-2023	United States	43	Female	Laptop	1 Month	2022-07-14	2022
	390	Premium	13	23-06-2022	27-06-2023	United States	42	Male	Laptop	1 Month	2022-06-23	2022
	400	Premium	12	17-07-2022	26-06-2023	United States	47	Female	Laptop	1 Month	2022-07-17	2022
	440	Premium	13	05-10-2022	28-06-2023	United States	48	Female	Laptop	1 Month	2022-10-05	2022
	534	Premium	15	07-06-2022	29-06-2023	United States	42	Female	Laptop	1 Month	2022-06-07	2022
	550	Premium	13	03-09-2022	28-06-2023	United States	41	Female	Laptop	1 Month	2022-09-03	2022

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration	Date_N	year
580	581	Premium	10	02-08-2022	29-06-2023	United States	29	Female	Laptop	1 Month	2022-08-02	2022
625	626	Premium	10	23-09-2022	30-06-2023	United States	30	Male	Laptop	1 Month	2022-09-23	2022
655	656	Premium	14	31-07-2022	29-06-2023	United States	33	Female	Laptop	1 Month	2022-07-31	2022
715	716	Premium	10	26-10-2022	30-06-2023	United States	43	Male	Laptop	1 Month	2022-10-26	2022
775	776	Premium	11	21-10-2022	01-07-2023	United States	44	Male	Laptop	1 Month	2022-10-21	2022
805	806	Premium	15	01-07-2022	30-06-2023	United States	30	Female	Laptop	1 Month	2022-07-01	2022
834	835	Premium	12	27-09-2022	29-06-2023	United States	31	Male	Laptop	1 Month	2022-09-27	2022
850	851	Premium	15	09-11-2022	30-06-2023	United States	47	Male	Laptop	1 Month	2022-11-09	2022
925	926	Premium	13	23-10-2022	02-07-2023	United States	33	Female	Laptop	1 Month	2022-10-23	2022
1000	1001	Premium	12	12-08-2022	03-07-2023	United States	34	Female	Laptop	1 Month	2022-08-12	2022
1059	1060	Premium	10	08-11-2022	02-07-2023	United States	50	Female	Laptop	1 Month	2022-11-08	2022
1075	1076	Premium	15	06-08-2022	03-07-2023	United States	38	Female	Laptop	1 Month	2022-08-06	2022
1134	1135	Premium	13	23-10-2022	02-07-2023	United States	36	Male	Laptop	1 Month	2022-10-23	2022
1150	1151	Premium	12	30-06-2022	01-07-2023	United States	43	Male	Laptop	1 Month	2022-06-30	2022
1180	1181	Premium	15	11-09-2022	01-07-2023	United States	40	Female	Laptop	1 Month	2022-09-11	2022
1240	1241	Premium	14	28-07-2022	02-07-2023	United States	47	Female	Laptop	1 Month	2022-07-28	2022

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration	Date_N	year
1255	1256	Premium	13	03-10-2022	05-07-2023	United States	43	Male	Laptop	1 Month	2022-10-03	2022
1480	1481	Premium	14	03-11-2022	04-07-2023	United States	41	Female	Laptop	1 Month	2022-11-03	2022
1584	1585	Premium	10	05-07-2022	05-07-2023	United States	42	Male	Laptop	1 Month	2022-07-05	2022
1615	1616	Premium	10	01-11-2022	08-07-2023	United States	48	Male	Laptop	1 Month	2022-11-01	2022
1630	1631	Premium	14	09-09-2022	07-07-2023	United States	44	Male	Laptop	1 Month	2022-09-09	2022
1675	1676	Premium	15	09-10-2022	07-07-2023	United States	35	Female	Laptop	1 Month	2022-10-09	2022
1705	1706	Premium	15	29-07-2022	07-07-2023	United States	47	Male	Laptop	1 Month	2022-07-29	2022
1780	1781	Premium	15	22-07-2022	06-07-2023	United States	35	Female	Laptop	1 Month	2022-07-22	2022
1809	1810	Premium	14	19-09-2022	09-07-2023	United States	27	Male	Laptop	1 Month	2022-09-19	2022
1959	1960	Premium	13	23-10-2022	08-07-2023	United States	41	Female	Laptop	1 Month	2022-10-23	2022
1990	1991	Premium	12	30-07-2022	08-07-2023	United States	35	Male	Laptop	1 Month	2022-07-30	2022
2005	2006	Premium	13	16-07-2022	10-07-2023	United States	41	Female	Laptop	1 Month	2022-07-16	2022
2065	2066	Premium	15	12-07-2022	10-07-2023	United States	48	Female	Laptop	1 Month	2022-07-12	2022
2200	2201	Premium	12	25-07-2022	10-07-2023	United States	29	Male	Laptop	1 Month	2022-07-25	2022
2290	2291	Premium	11	18-08-2022	11-07-2023	United States	31	Female	Laptop	1 Month	2022-08-18	2022
2334	2335	Premium	15	08-09-2022	10-07-2023	United States	45	Male	Laptop	1 Month	2022-09-08	2022

User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration	Date_N	year	
2380	2381	Premium	12	30-10-2022	11-07-2023	United States	30	Female	Laptop	1 Month	2022-10-30	2022

```
In [185]: # if you have find the unique value of device
Netflix['Device'].unique()
```

```
Out[185]: array(['Smartphone', 'Tablet', 'Smart TV', 'Laptop'], dtype=object)
```

```
In [178]: Netflix['Subscription Type'].unique()
```

```
Out[178]: array(['Basic', 'Premium', 'Standard'], dtype=object)
```

## What is the maximum duration of a subscriber

```
In [186]: Netflix.head()
```

User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration	Date_N	year	
0	1	Basic	10	15-01-2022	10-06-2023	United States	28	Male	Smartphone	1 Month	2022-01-15	2022
1	2	Premium	15	05-09-2021	22-06-2023	Canada	35	Female	Tablet	1 Month	2021-09-05	2021
2	3	Standard	12	28-02-2023	27-06-2023	United Kingdom	42	Male	Smart TV	1 Month	2023-02-28	2023
3	4	Standard	12	10-07-2022	26-06-2023	Australia	51	Female	Laptop	1 Month	2022-07-10	2022
4	5	Basic	10	01-05-2023	28-06-2023	Germany	33	Male	Smartphone	1 Month	2023-05-01	2023

```
In [187]: Netflix['Plan Duration'].unique()
```

```
Out[187]: array(['1 Month'], dtype=object)
```

## sort the dataset with year

In [207]:

Netflix.sort\_values(by='year', ascending=1)

Out[207]:

	User ID	Subscription Type	Monthly Revenue	Join Date	Last Payment Date	Country	Age	Gender	Device	Plan Duration	Date_N	year
47	48	Standard	12	15-09-2021	24-06-2023	Mexico	32	Male	Tablet	1 Month	2021-09-15	2021
67	68	Standard	12	09-11-2021	24-06-2023	Mexico	33	Male	Tablet	1 Month	2021-11-09	2021
126	127	Basic	10	23-11-2021	23-06-2023	Brazil	36	Male	Smartphone	1 Month	2021-11-23	2021
22	23	Standard	12	05-12-2021	27-06-2023	United Kingdom	49	Female	Smart TV	1 Month	2021-12-05	2021
116	117	Basic	15	30-10-2021	23-06-2023	Brazil	40	Female	Tablet	1 Month	2021-10-30	2021
...	...	...	...	...	...	...	...	...	...	...	...	...
89	90	Standard	13	03-02-2023	23-06-2023	Italy	49	Female	Smartphone	1 Month	2023-02-03	2023
30	31	Premium	15	03-02-2023	22-06-2023	United States	28	Female	Smart TV	1 Month	2023-02-03	2023
29	30	Basic	10	17-05-2023	22-06-2023	Italy	42	Male	Smartphone	1 Month	2023-05-17	2023
109	110	Basic	13	26-01-2023	24-06-2023	Italy	37	Female	Laptop	1 Month	2023-01-26	2023
40	41	Premium	15	20-01-2023	22-06-2023	United States	31	Female	Laptop	1 Month	2023-01-20	2023

2500 rows × 12 columns

In [ ]: